

PATENT

Attorney Docket No.: AMAT/8338/DSM/LOW K/JW  
Express Mail No.:EV335470113US

**ABSTRACT OF THE DISCLOSURE**

A method for depositing an organosilicate layer on a substrate includes varying one or more processing conditions during a process sequence for depositing an organosilicate layer from a gas mixture comprising an organosilicon compound in the presence of RF power in a processing chamber. In one aspect, the distance between the substrate and a gas distribution manifold in the processing chamber is varied during processing. Preferably, the method of depositing an organosilicate layer minimizes plasma-induced damage to the substrate.